

U Riverbend Bivd. Suite F Saint Rose, LA 70087

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

December 27, 2006

Luis Vega EA Engineering, Science & Tech 405 S Highway 121 Building C Suite 100 Lewisville, TX 75067

RE: Project: 2064973

RE: Project ID: Gulfco Marine Superfund Site

Willin R. Showhelfer

Dear Luis Vega:

Enclosed are the analytical results for sample(s) received by the laboratory on December 08, 2006. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Randy Shackelford



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1000 Riverbend Blvd. Suite F St. Rose , LA 70087

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006



Report of Laboratory Analysis Project Number: 2064973







Pace Analytical Services, Inc. 1000 Riverbend Blvd. Suite F St. Rose , LA 70087

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Client: EA Engineering, Science & Tech Project: Gulfco Marine Superfund Site

Project No.: 2064973

Sample ID	Lab ID	Matrix	Collection Date/Time	Received Date/Time
2WSED4	20489229	Soil	12/06/2006 12:08	12/08/2006 10:00
2WSED15	20489230	Soil	12/06/2006 11:45	12/08/2006 10:00





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Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Project: 2064973

Analytical Method	Batch	Sample used for QC
EPA 8081	79329	Batch sample from another client
EPA 8082	79737	Batch sample from another client
EPA 6010	79791	Batch sample from another client
EPA 7471	79792	Batch sample from another client
EPA 8270	79654	Batch sample from another client
EPA 8260	79997	Project sample 2WSED4

Project Narrative



Pace Analytical Services, Inc.

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2064973 **Project:**

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times:

All holding times were met.

Blanks:

The following blank results were above reporting limits:

Batch 79997 sample 20490292 Acetone

Laboratory Control Samples:

LCS recoveries outside of QC limits are qualified in the Report of Quality Control section.

Matrix Spikes and Duplicates:

MS or MSD recoveries outside of QC limits are qualified in the Report of Quality Control section.

Surrogates:

Surrogate recoveries outside of QC limits are qualified in the surrogate results section.



St. Rose , LA 70087 Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

New Orleans Laboratory

Client: EA Engineering, Science & Tech

Client ID: 2WSED4 Site: None

Project: Gulfco Marine Superfund Site **Project No.:** 2064973 Sample Qu:

Lab ID: 20489229 % Moisture: Not Corrected Matrix: Soil

Description: None Prep Level: Soil **Batch:** 79997

Method: 8260 VOAs Low Soil Units: ug/kg Target List: 8260 SL20

> **Collected:** <u>12/06/06</u> **Received:** 12/08/06

Prepared: 12/14/06 **Analyzed:** <u>12/14/06</u> <u>12:49</u> <u>RMP (1)</u> Prep Factor: 1

CAS Number	Parameter	Dilution	Result	Qu	Adjusted MDL	Reporting Limit	Reg. Limit
7-64-1	Acetone	1	48.6	A11,B	5.10	10.0	
07-02-8	Acrolein	1	ND		9.95	20.0	
07-13-1	Acrylonitrile	1	ND		3.01	20.0	
1-43-2	Benzene	1	ND		0.116	5.00	
08-86-1	Bromobenzene	1	ND		0.160	5.00	
5-27-4	Bromodichloromethane	1	ND		0.155	5.00	
5-25-2	Bromoform	1	ND		0.228	5.00	
4-83-9	Bromomethane	1	ND		0.840	5.00	
8-93-3	2-Butanone (MEK)	1	6.77	J A11	1.74	10.0	
04-51-8	n-Butylbenzene	1	ND		0.0649	5.00	
35-98-8	sec-Butylbenzene	1	ND		0.0886	5.00	
8-06-6	tert-Butylbenzene	1	ND		0.0819	5.00	
5-15-0	Carbon disulfide	1	1.94	J	0.0711	5.00	
5-23-5	Carbon tetrachloride	1	ND		0.109	5.00	
08-90-7	Chlorobenzene	1	ND		0.126	5.00	
5-00-3	Chloroethane	1	ND		0.271	5.00	
0-75-8	2-Chloroethylvinyl ether	1	ND		0.585	20.0	
7-66-3	Chloroform	1	ND		0.315	5.00	
1-87-3	Chloromethane	1	ND		0.203	5.00	
5-49-8	2-Chlorotoluene	1	ND		0.147	5.00	
06-43-4	4-Chlorotoluene	1	ND		0.105	5.00	
5-12-8	1,2-Dibromo-3-chloropropane	1	ND		1.69	5.00	
24-48-1	Dibromochloromethane	1	ND		0.159	5.00	
06-93-4	1,2-Dibromoethane (EDB)	1	ND		0.890	5.00	
1-95-3	Dibromomethane	1	ND		0.461	5.00	
5-50-1	1,2-Dichlorobenzene	1	ND		0.125	5.00	
11-73-1	1,3-Dichlorobenzene	1	ND		0.104	5.00	
06-46-7	1,4-Dichlorobenzene	1	ND		0.178	5.00	
0-57-6	trans-1,4-Dichloro-2-butene	1	ND		0.720	5.00	
5-71-8	Dichlorodifluoromethane	1	ND		0.253	5.00	
5-34-3	1,1-Dichloroethane	1	ND		0.130	5.00	
07-06-2	1,2-Dichloroethane	1	ND		0.106	5.00	
10-59-0	1,2-Dichloroethene (Total)	1	ND		0.363	10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable. Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

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Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

12/27/2006 15:17:05



St. Rose , LA 70087 Phone: 504.469.0333

Fax: 504.469.0555 LELAP # 02006

Client: EA Engineering, Science & Tech

Client ID: 2WSED4 Site: None

New Orleans Laboratory

Project: Gulfco Marine Superfund Site **Project No.:** 2064973 Sample Qu:

Lab ID: 20489229 % Moisture: Not Corrected Matrix: Soil

Description: None Prep Level: Soil **Batch:** 79997

Method: 8260 VOAs Low Soil Units: ug/kg Target List: 8260 SL20

> **Collected:** <u>12/06/06</u> **Received:** 12/08/06

Prepared: 12/14/06 **Analyzed:** <u>12/14/06</u> <u>12:49</u> <u>RMP (1)</u> Prep Factor: 1

CAS Number	Parameter	Dilution	Result	Qu	Adjusted MDL	Reporting Limit	Reg. Limit
75-35-4	1,1-Dichloroethene	1	ND		0.286	5.00	
56-59-2	cis-1,2-Dichloroethene	1	ND		0.177	5.00	
56-60-5	trans-1,2-Dichloroethene	1	ND		0.312	5.00	
8-87-5	1,2-Dichloropropane	1	ND		0.546	5.00	
42-28-9	1,3-Dichloropropane	1	ND		0.276	5.00	
94-20-7	2,2-Dichloropropane	1	ND		0.182	5.00	
663-58-6	1,1-Dichloropropene	1	ND		0.187	5.00	
0061-01-5	cis-1,3-Dichloropropene	1	ND		0.169	5.00	
0061-02-6	trans-1,3-Dichloropropene	1	ND		0.169	5.00	
37-68-3	Hexachloro-1,3-butadiene	1	ND		0.111	5.00	
91-78-6	2-Hexanone	1	ND		2.49	10.0	
4-88-4	Iodomethane	1	ND		0.327	5.00	
8-82-8	Isopropylbenzene (Cumene)	1	ND		0.0844	5.00	
9-87-6	p-Isopropyltoluene	1	ND		0.101	5.00	
9-20-9	Methyl acetate	1	ND		0.815	10.0	
08-87-2	Methylcyclohexane	1	ND		0.247	10.0	
5-09-2	Methylene chloride	1	4.75 J	A11	0.374	5.00	
08-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		0.689	10.0	
03-65-1	n-Propylbenzene	1	ND		0.111	5.00	
00-42-5	Styrene	1	ND		0.110	5.00	
30-20-6	1,1,1,2-Tetrachloroethane	1	ND		0.333	5.00	
9-34-5	1,1,2,2-Tetrachloroethane	1	ND		0.194	5.00	
27-18-4	Tetrachloroethene	1	ND		0.156	5.00	
08-88-3	Toluene	1	ND		0.0844	5.00	
00-41-4	Ethylbenzene	1	ND		0.117	5.00	
20-82-1	1,2,4-Trichlorobenzene	1	ND		0.131	5.00	
1-55-6	1,1,1-Trichloroethane	1	ND		0.124	5.00	
9-00-5	1,1,2-Trichloroethane	1	ND		0.164	5.00	
9-01-6	Trichloroethene	1	ND		0.130	5.00	
5-69-4	Trichlorofluoromethane	1	ND		0.351	5.00	
6-18-4	1,2,3-Trichloropropane	1	ND		1.27	5.00	
6-13-1	1,1,2-Trichlorotrifluoroethane	1	ND		0.341	5.00	
5-63-6	1,2,4-Trimethylbenzene	1	ND		0.0816	5.00	

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DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.



1000 Riverbend Blvd. Suite F St. Rose , LA 70087

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Client: EA Engineering, Science & Tech

Client ID: 2WSED4 Site: None

New Orleans Laboratory

Project: Gulfco Marine Superfund Site **Project No.:** 2064973 Sample Qu:

Lab ID: 20489229 % Moisture: Not Corrected Matrix: Soil

Description: None Prep Level: Soil Batch: 79997

Method: 8260 VOAs Low Soil Units: ug/kg Target List: 8260 SL20

> **Collected:** <u>12/06/06</u> **Received:** 12/08/06

Prepared: 12/14/06 **Analyzed:** <u>12/14/06</u> <u>12:49</u> <u>RMP (1)</u> Prep Factor: 1

CAS Number	Parameter	Dilution	Result	Qu	Adjusted MDL	Reporting Limit	Reg. Limit
108-67-8	1,3,5-Trimethylbenzene	1	ND		0.122	5.00	- Limit
108-05-4	Vinyl acetate	1	ND		0.269	10.0	
75-01-4	Vinyl chloride	1	ND		0.209	5.00	
	m&p-Xylene	1	ND		0.182	5.00	
95-47-6	o-Xylene	1	ND		0.0799	5.00	
1634-04-4	Methyl-tert-butyl ether	1	ND		0.214	5.00	

⁷² compound(s) reported



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LELAP # 02006



Client: EA Engineering, Science & Tech

Client ID: 2WSED4 Site: None

Project: Gulfco Marine Superfund Site **Project No.:** 2064973 Sample Qu:

Lab ID: 20489229 % Moisture: Not Corrected Matrix: Soil

Description: None Prep Level: Soil **Batch:** 79654

Method: 8270 SVOAs Low Soil Units: ug/kg Target List: 8270 SL20

> **Collected:** <u>12/06/06</u> **Received:** 12/08/06

Prepared: 12/16/06 **Analyzed:** <u>12/18/06</u> <u>20:33</u> <u>JAM (1)</u> Prep Factor: 1

CAS Number	Parameter	Dilution	Result	Qu	Adjusted MDL	Reporting Limit	Reg. Limit
3-32-9	Acenaphthene	1	ND		36.5	333.	
08-96-8	Acenaphthylene	1	36.0	J	22.0	333.	
8-86-2	Acetophenone	1	ND		33.3	333.	
2-53-3	Aniline	1	ND		24.1	333.	
20-12-7	Anthracene	1	ND		35.7	333.	
912-24-9	Atrazine	1	ND			333.	
00-52-7	Benzaldehyde	1	ND			333.	
2-87-5	Benzidine	1	ND			1000	
5-55-3	Benzo(a)anthracene	1	ND		34.3	333.	
05-99-2	Benzo(b)fluoranthene	1	ND		22.5	333.	
07-08-9	Benzo(k)fluoranthene	1	ND		35.9	333.	
5-85-0	Benzoic acid	1	ND		46.3	833.	
91-24-2	Benzo(g,h,i)perylene	1	ND		24.3	333.	
)-32-8	Benzo(a)pyrene	1	ND		20.2	333.	
0-51-6	Benzyl alcohol	1	ND		34.6	333.	
2-52-4	Biphenyl (Diphenyl)	1	ND			333.	
1-55-3	4-Bromophenylphenyl ether	1	ND		34.6	333.	
5-68-7	Butylbenzylphthalate	1	ND		29.6	333.	
05-60-2	Caprolactam	1	ND			333.	
5-74-8	Carbazole	1	ND		24.5	333.	
) -50-7	4-Chloro-3-methylphenol	1	ND		33.1	333.	
06-47-8	4-Chloroaniline	1	ND		52.8	333.	
1-91-1	bis(2-Chloroethoxy)methane	1	ND		38.7	333.	
1-44-4	bis(2-Chloroethyl) ether	1	ND		48.8	333.	
-58-7	2-Chloronaphthalene	1	ND		39.2	333.	
5-57-8	2-Chlorophenol	1	ND		36.8	333.	
005-72-3	4-Chlorophenylphenyl ether	1	ND		25.0	333.	
8-01-9	Chrysene	1	ND		19.9	333.	
-70-3	Dibenz(a,h)anthracene	1	ND		37.5	333.	
2-64-9	Dibenzofuran	1	ND		34.9	333.	
-94-1	3,3'-Dichlorobenzidine	1	ND		34.3	667.	
20-83-2	2,4-Dichlorophenol	1	ND		31.0	333.	
1-66-2	Diethylphthalate	1	ND		35.6	333.	

ND denotes Not Detected at or above the adjusted reporting limit.

Regulatory limit denotes an actual regulatory limit or a client-requested notification limit. Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field. 12/27/2006 15:17:05

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

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For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.



Pace Analytical Services, Inc. 1000 Riverbend Blvd. Suite F St. Rose , LA 70087

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Client: EA Engineering, Science & Tech

Client ID: 2WSED4 Site: None

New Orleans Laboratory

Project: Gulfco Marine Superfund Site **Project No.:** 2064973 Sample Qu:

Lab ID: 20489229 % Moisture: Not Corrected Matrix: Soil

Description: None Prep Level: Soil **Batch:** 79654

Method: 8270 SVOAs Low Soil Units: ug/kg Target List: 8270 SL20

> **Collected:** <u>12/06/06</u> **Received:** 12/08/06

Prepared: 12/16/06 **Analyzed:** <u>12/18/06</u> <u>20:33</u> <u>JAM (1)</u> Prep Factor: 1

CAS Number	Parameter	Dilution	Result	Qu	Adjusted MDL	Reporting Limit	Reg. Limit
05-67-9	2,4-Dimethylphenol	1	ND		42.8	333.	
31-11-3	Dimethylphthalate	1	ND		23.3	333.	
4-74-2	Di-n-butylphthalate	1	ND		40.8	333.	
34-52-1	4,6-Dinitro-2-methylphenol	1	ND		21.2	333.	
1-28-5	2,4-Dinitrophenol	1	ND		32.4	333.	
21-14-2	2,4-Dinitrotoluene	1	ND		31.6	333.	
06-20-2	2,6-Dinitrotoluene	1	ND		32.6	333.	
17-84-0	Di-n-octylphthalate	1	ND		30.4	333.	
22-66-7	1,2-Diphenylhydrazine	1	ND		32.5	333.	
17-81-7	bis(2-Ethylhexyl)phthalate	1	ND		44.2	333.	
06-44-0	Fluoranthene	1	ND		26.1	333.	
5-73-7	Fluorene	1	ND		23.5	333.	
18-74-1	Hexachlorobenzene	1	ND		38.5	333.	
7-47-4	Hexachlorocyclopentadiene	1	ND		24.8	333.	
7-72-1	Hexachloroethane	1	ND		33.0	333.	
93-39-5	Indeno(1,2,3-cd)pyrene	1	ND		23.4	333.	
3-59-1	Isophorone	1	ND		41.3	333.	
1-57-6	2-Methylnaphthalene	1	ND		42.3	333.	
5-48-7	2-Methylphenol (o-Cresol)	1	ND		35.0	333.	
3-74-4	2-Nitroaniline	1	ND		27.4	333.	
9-09-2	3-Nitroaniline	1	ND		26.5	333.	
00-01-6	4-Nitroaniline	1	ND		41.0	333.	
3-95-3	Nitrobenzene	1	ND		20.9	333.	
3-75-5	2-Nitrophenol	1	ND		37.5	333.	
00-02-7	4-Nitrophenol	1	ND		31.5	333.	
2-75-9	N-Nitrosodimethylamine	1	ND		34.5	333.	
21-64-7	N-Nitroso-di-n-propylamine	1	ND		48.9	333.	
5-30-6	N-Nitrosodiphenylamine	1	ND	A10	38.7	333.	
08-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		34.3	333.	
5-01-8	Phenanthrene	1	ND		32.7	333.	
08-95-2	Phenol	1	ND		37.8	333.	
29-00-0	Pyrene	1	447.		36.3	333.	
10-86-1	Pyridine	1	ND		40.4	333.	

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DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

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12/27/2006 15:17:05



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> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Client: EA Engineering, Science & Tech

Client ID: 2WSED4 Site: None

New Orleans Laboratory

Project: Gulfco Marine Superfund Site **Project No.:** 2064973 Sample Qu:

Lab ID: 20489229 % Moisture: Not Corrected Matrix: Soil

Description: None Prep Level: Soil **Batch:** 79654

Method: 8270 SVOAs Low Soil Units: ug/kg Target List: 8270 SL20

> **Collected:** <u>12/06/06</u> **Received:** 12/08/06

Prepared: 12/16/06 **Analyzed:** <u>12/18/06</u> <u>20:33</u> <u>JAM (1)</u> Prep Factor: 1

					Adjusted	Reporting	Reg.
CAS Number	Parameter	Dilution	Result	Qu	MDL	Limit	Limit
95-95-4	2,4,5-Trichlorophenol	1	ND		18.1	333.	
88-06-2	2,4,6-Trichlorophenol	1	ND		35.1	333.	

68 compound(s) reported



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Pace Analytical Services, Inc.

Fax: 504.469.0555 LELAP # 02006

Client: EA Engineering, Science & Tech

Client ID: 2WSED15 Site: None

New Orleans Laboratory

Project: Gulfco Marine Superfund Site **Project No.:** 2064973 Sample Qu:

Lab ID: 20489230 % Moisture: Not Corrected Matrix: Soil

Description: None Prep Level: Soil **Batch:** 79997

Method: 8260 VOAs Low Soil Units: ug/kg Target List: 8260 SL20

> **Collected:** <u>12/06/06</u> **Received:** 12/08/06

Prepared: 12/14/06 **Analyzed:** <u>12/14/06</u> <u>13:56</u> <u>RMP (1)</u> Prep Factor: 1

CAS Number	Parameter	Dilution	Result	Qu	Adjusted MDL	Reporting Limit	Reg. Limit
67-64-1	Acetone	1	40.8	A11,B	5.10	10.0	
107-02-8	Acrolein	1	ND		9.95	20.0	
107-13-1	Acrylonitrile	1	ND		3.01	20.0	
71-43-2	Benzene	1	ND		0.116	5.00	
108-86-1	Bromobenzene	1	ND		0.160	5.00	
75-27-4	Bromodichloromethane	1	ND		0.155	5.00	
75-25-2	Bromoform	1	ND		0.228	5.00	
74-83-9	Bromomethane	1	ND		0.840	5.00	
78-93-3	2-Butanone (MEK)	1	ND	A11	1.74	10.0	
104-51-8	n-Butylbenzene	1	ND		0.0649	5.00	
135-98-8	sec-Butylbenzene	1	ND		0.0886	5.00	
98-06-6	tert-Butylbenzene	1	ND		0.0819	5.00	
75-15-0	Carbon disulfide	1	1.59	J	0.0711	5.00	
56-23-5	Carbon tetrachloride	1	ND		0.109	5.00	
108-90-7	Chlorobenzene	1	ND		0.126	5.00	
75-00-3	Chloroethane	1	ND		0.271	5.00	
110-75-8	2-Chloroethylvinyl ether	1	ND		0.585	20.0	
67-66-3	Chloroform	1	ND		0.315	5.00	
74-87-3	Chloromethane	1	ND		0.203	5.00	
95-49-8	2-Chlorotoluene	1	ND		0.147	5.00	
106-43-4	4-Chlorotoluene	1	ND		0.105	5.00	
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		1.69	5.00	
124-48-1	Dibromochloromethane	1	ND		0.159	5.00	
106-93-4	1,2-Dibromoethane (EDB)	1	ND		0.890	5.00	
74-95-3	Dibromomethane	1	ND		0.461	5.00	
95-50-1	1,2-Dichlorobenzene	1	ND		0.125	5.00	
541-73-1	1,3-Dichlorobenzene	1	ND		0.104	5.00	
106-46-7	1,4-Dichlorobenzene	1	ND		0.178	5.00	
110-57-6	trans-1,4-Dichloro-2-butene	1	ND		0.720	5.00	
75-71-8	Dichlorodifluoromethane	1	ND		0.253	5.00	
75-34-3	1,1-Dichloroethane	1	ND		0.130	5.00	
107-06-2	1,2-Dichloroethane	1	ND		0.106	5.00	
540-59-0	1,2-Dichloroethene (Total)	1	ND		0.363	10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable. Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

12/27/2006 15:17:06



St. Rose , LA 70087 Phone: 504.469.0333

Fax: 504.469.0555 LELAP # 02006

Client: EA Engineering, Science & Tech

Client ID: 2WSED15 Site: None

New Orleans Laboratory

Project: Gulfco Marine Superfund Site **Project No.:** 2064973 Sample Qu:

Lab ID: 20489230 % Moisture: Not Corrected Matrix: Soil

Description: None Prep Level: Soil Batch: 79997

Method: 8260 VOAs Low Soil Units: ug/kg Target List: 8260 SL20

> **Collected:** <u>12/06/06</u> **Received:** 12/08/06

Prepared: 12/14/06 **Analyzed:** <u>12/14/06</u> <u>13:56</u> <u>RMP (1)</u> Prep Factor: 1

CAS Number	Parameter	Dilution	Result	Adjusted Qu MDL	Reporting Limit	Reg. Limit
5-35-4	1,1-Dichloroethene	1	ND	0.286	5.00	
56-59-2	cis-1,2-Dichloroethene	1	ND	0.177	5.00	
56-60-5	trans-1,2-Dichloroethene	1	ND	0.312	5.00	
8-87-5	1,2-Dichloropropane	1	ND	0.546	5.00	
42-28-9	1,3-Dichloropropane	1	ND	0.276	5.00	
94-20-7	2,2-Dichloropropane	1	ND	0.182	5.00	
63-58-6	1,1-Dichloropropene	1	ND	0.187	5.00	
0061-01-5	cis-1,3-Dichloropropene	1	ND	0.169	5.00	
0061-02-6	trans-1,3-Dichloropropene	1	ND	0.169	5.00	
7-68-3	Hexachloro-1,3-butadiene	1	ND	0.111	5.00	
91-78-6	2-Hexanone	1	ND	2.49	10.0	
4-88-4	Iodomethane	1	ND	0.327	5.00	
8-82-8	Isopropylbenzene (Cumene)	1	ND	0.0844	5.00	
9-87-6	p-Isopropyltoluene	1	ND	0.101	5.00	
9-20-9	Methyl acetate	1	ND	0.815	10.0	
08-87-2	Methylcyclohexane	1	ND	0.247	10.0	
5-09-2	Methylene chloride	1	4.53 J	A11 0.374	5.00	
08-10-1	4-Methyl-2-pentanone (MIBK)	1	ND	0.689	10.0	
03-65-1	n-Propylbenzene	1	ND	0.111	5.00	
00-42-5	Styrene	1	ND	0.110	5.00	
30-20-6	1,1,1,2-Tetrachloroethane	1	ND	0.333	5.00	
9-34-5	1,1,2,2-Tetrachloroethane	1	ND	0.194	5.00	
27-18-4	Tetrachloroethene	1	ND	0.156	5.00	
08-88-3	Toluene	1	ND	0.0844	5.00	
00-41-4	Ethylbenzene	1	ND	0.117	5.00	
20-82-1	1,2,4-Trichlorobenzene	1	ND	0.131	5.00	
1-55-6	1,1,1-Trichloroethane	1	ND	0.124	5.00	
9-00-5	1,1,2-Trichloroethane	1	ND	0.164	5.00	
9-01-6	Trichloroethene	1	ND	0.130	5.00	
5-69-4	Trichlorofluoromethane	1	ND	0.351	5.00	
6-18-4	1,2,3-Trichloropropane	1	ND	1.27	5.00	
6-13-1	1,1,2-Trichlorotrifluoroethane	1	ND	0.341	5.00	
5-63-6	1,2,4-Trimethylbenzene	1	ND	0.0816	5.00	

ND denotes Not Detected at or above the adjusted reporting limit.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable. Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable. Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

12/27/2006 15:17:06

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.



St. Rose , LA 70087

Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Client: EA Engineering, Science & Tech

Client ID: 2WSED15 Site: None

New Orleans Laboratory

Project: Gulfco Marine Superfund Site **Project No.:** 2064973 Sample Qu:

Lab ID: 20489230 % Moisture: Not Corrected Matrix: Soil

Description: None Prep Level: Soil Batch: 79997

Method: 8260 VOAs Low Soil Units: ug/kg Target List: 8260 SL20

> **Collected:** <u>12/06/06</u> **Received:** 12/08/06

Prepared: 12/14/06 **Analyzed:** <u>12/14/06</u> <u>13:56</u> <u>RMP (1)</u> Prep Factor: 1

CAS Number	Parameter	Dilution	Result	Qu	Adjusted MDL	Reporting Limit	Reg. Limit
108-67-8	1,3,5-Trimethylbenzene	1	ND		0.122	5.00	
108-05-4	Vinyl acetate	1	ND		0.269	10.0	
75-01-4	Vinyl chloride	1	ND		0.209	5.00	
	m&p-Xylene	1	ND		0.182	5.00	
95-47-6	o-Xylene	1	ND		0.0799	5.00	
1634-04-4	Methyl-tert-butyl ether	1	ND		0.214	5.00	

⁷² compound(s) reported



Pace Analytical Services, Inc. 1000 Riverbend Blvd. Suite F St. Rose , LA 70087

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

New Orleans Laboratory

Client: EA Engineering, Science & Tech

Client ID: 2WSED15 Site: None

Project: Gulfco Marine Superfund Site **Project No.:** 2064973 Sample Qu:

Lab ID: 20489230 % Moisture: Not Corrected Matrix: Soil

Description: None Prep Level: Soil **Batch:** 79654

Method: 8270 SVOAs Low Soil Units: ug/kg Target List: 8270 SL20

> **Collected:** <u>12/06/06</u> **Received:** 12/08/06

Prepared: 12/16/06 **Analyzed:** <u>12/18/06</u> <u>19:38</u> <u>JAM (1)</u> Prep Factor: 1

CAS Number	Parameter	Dilution	Result	Qu	Adjusted MDL	Reporting Limit	Reg. Limit
33-32-9		1	ND	Qu	36.5	333.	Lillit
208-96-8	Acenaphthene Acenaphthylene	1	ND ND		22.0	333. 333.	
18-86-2	• •	1	ND ND		33.3	333. 333.	
o-oo-2 2-53-3	Acetophenone Aniline	1	ND ND		24.1	333. 333.	
2-55-5 20-12-7	Anthracene	1	ND ND		35.7	333. 333.	
20-12-7 912-24-9	Atrazine	1	ND ND		33.7	333.	
912-24-9 00-52-7	Benzaldehyde	1	ND ND			333. 333.	
2-87-5	Benzidine	1	ND ND			1000	
2-87-3 5-55-3	Benziquine Benzo(a)anthracene	1	ND ND		34.3	333.	
	* *						
)5-99-2)7-08-9	Benzo(b)fluoranthene Benzo(k)fluoranthene	1 1	ND ND		22.5 35.9	333. 333.	
	Benzo(k)nuoraninene Benzoic acid	1			35.9 46.3	833.	
5-85-0 91-24-2		1	ND ND		24.3	833. 333.	
91-24-2)-32-8	Benzo(g,h,i)perylene	1	ND ND		24.3	333. 333.	
)-32-8)0-51-6	Benzo(a)pyrene		ND ND			333. 333.	
	Benzyl alcohol	1			34.6		
2-52-4	Biphenyl (Diphenyl)	1	ND ND		34.6	333. 333.	
)1-55-3	4-Bromophenylphenyl ether	1					
5-68-7	Butylbenzylphthalate	1	ND		29.6	333.	
05-60-2	Caprolactam	1	ND		24.5	333.	
5-74-8	Carbazole	1	ND		24.5	333.	
9-50-7	4-Chloro-3-methylphenol	1	ND		33.1	333.	
06-47-8	4-Chloroaniline	1	ND		52.8	333.	
1-91-1	bis(2-Chloroethoxy)methane	1	ND		38.7	333.	
1-44-4	bis(2-Chloroethyl) ether	1	ND		48.8	333.	
1-58-7	2-Chloronaphthalene	1	ND		39.2	333.	
5-57-8	2-Chlorophenol	1	ND		36.8	333.	
005-72-3	4-Chlorophenylphenyl ether	1	ND		25.0	333.	
8-01-9	Chrysene	1	ND		19.9	333.	
3-70-3	Dibenz(a,h)anthracene	1	ND		37.5	333.	
32-64-9	Dibenzofuran	1	ND		34.9	333.	
-94-1	3,3'-Dichlorobenzidine	1	ND		34.3	667.	
20-83-2	2,4-Dichlorophenol	1	ND		31.0	333.	
4-66-2	Diethylphthalate	1	ND		35.6	333.	

ND denotes Not Detected at or above the adjusted reporting limit.

12/27/2006 15:17:06

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable. Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable. Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.



> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

St. Rose , LA 70087

Client: EA Engineering, Science & Tech

Client ID: 2WSED15 Site: None

New Orleans Laboratory

Project: Gulfco Marine Superfund Site **Project No.:** 2064973 Sample Qu:

Lab ID: 20489230 % Moisture: Not Corrected Matrix: Soil

Description: None Prep Level: Soil **Batch:** 79654

Method: 8270 SVOAs Low Soil Units: ug/kg Target List: 8270 SL20

> **Collected:** <u>12/06/06</u> **Received:** 12/08/06

Prepared: 12/16/06 **Analyzed:** <u>12/18/06</u> <u>19:38</u> <u>JAM (1)</u> Prep Factor: 1

CAS Number	Parameter	Dilution	Result	Qu	Adjusted MDL	Reporting Limit	Reg. Limit
				Qu			Lillit
105-67-9	2,4-Dimethylphenol	1	ND		42.8	333.	
131-11-3	Dimethylphthalate	1	ND		23.3	333.	
34-74-2	Di-n-butylphthalate	1	ND		40.8	333.	
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		21.2	333.	
51-28-5	2,4-Dinitrophenol	1	ND		32.4	333.	
21-14-2	2,4-Dinitrotoluene	1	ND		31.6	333.	
506-20-2	2,6-Dinitrotoluene	1	ND		32.6	333.	
17-84-0	Di-n-octylphthalate	1	ND		30.4	333.	
22-66-7	1,2-Diphenylhydrazine	1	ND		32.5	333.	
17-81-7	bis(2-Ethylhexyl)phthalate	1	ND		44.2	333.	
206-44-0	Fluoranthene	1	36.3	J	26.1	333.	
36-73-7	Fluorene	1	ND		23.5	333.	
118-74-1	Hexachlorobenzene	1	ND		38.5	333.	
77-47-4	Hexachlorocyclopentadiene	1	ND		24.8	333.	
7-72-1	Hexachloroethane	1	ND		33.0	333.	
93-39-5	Indeno(1,2,3-cd)pyrene	1	ND		23.4	333.	
8-59-1	Isophorone	1	ND		41.3	333.	
1-57-6	2-Methylnaphthalene	1	ND		42.3	333.	
5-48-7	2-Methylphenol (o-Cresol)	1	ND		35.0	333.	
8-74-4	2-Nitroaniline	1	ND		27.4	333.	
9-09-2	3-Nitroaniline	1	ND		26.5	333.	
00-01-6	4-Nitroaniline	1	ND		41.0	333.	
08-95-3	Nitrobenzene	1	ND		20.9	333.	
8-75-5	2-Nitrophenol	1	ND		37.5	333.	
00-02-7	4-Nitrophenol	1	ND		31.5	333.	
52-75-9	N-Nitrosodimethylamine	1	ND		34.5	333.	
21-64-7	N-Nitroso-di-n-propylamine	1	ND		48.9	333.	
6-30-6	N-Nitrosodiphenylamine	1	ND	A10	38.7	333.	
08-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		34.3	333.	
5-01-8	Phenanthrene	1	ND		32.7	333.	
08-95-2	Phenol	1	ND		37.8	333.	
29-00-0	Pyrene	1	ND		36.3	333.	
10-86-1	Pyridine	1	ND		40.4	333.	

ND denotes Not Detected at or above the adjusted reporting limit.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable. Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

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DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.



New Orleans Laboratory

Pace Analytical Services, Inc.

1000 Riverbend Blvd. Suite F St. Rose , LA 70087

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Client: EA Engineering, Science & Tech

Client ID: 2WSED15 Site: None

Project: Gulfco Marine Superfund Site **Project No.:** 2064973 Sample Qu:

Lab ID: 20489230 % Moisture: Not Corrected Matrix: Soil

Description: None Prep Level: Soil **Batch:** 79654

Method: 8270 SVOAs Low Soil Units: ug/kg Target List: 8270 SL20

> **Collected:** <u>12/06/06</u> **Received:** 12/08/06

Prepared: 12/16/06 **Analyzed:** <u>12/18/06</u> <u>19:38</u> <u>JAM (1)</u> Prep Factor: 1

					Adjusted	Reporting	Reg.
CAS Number	Parameter	Dilution	Result	Qu	MDL	Limit	Limit
95-95-4	2,4,5-Trichlorophenol	1	ND		18.1	333.	
88-06-2	2,4,6-Trichlorophenol	1	ND		35.1	333.	

68 compound(s) reported



> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

St. Rose , LA 70087

Client: EA Engineering, Science & Tech

Client ID: 2WSED4 Site: None

New Orleans Laboratory

Project: Gulfco Marine Superfund Site **Project No.:** 2064973 Sample Qu:

Lab ID: 20489229 % Moisture: Not Corrected Matrix: Soil

Description: None Prep Level: Soil **Batch:** 79329

Method: 8081 Pests Low Soil Units: ug/kg Target List: 8081 SL20

> **Collected:** <u>12/06/06</u> **Received:** 12/08/06

Prepared: 12/19/06 **Analyzed:** <u>12/21/06</u> <u>18:38</u> <u>SLF (1)</u> Prep Factor: 1

					Adjusted	Reporting	Reg.
CAS Number	Parameter	Dilution	Result	Qu	MDL	Limit	Limit
309-00-2	Aldrin	1	ND	N	0.0915	1.70	
319-84-6	alpha-BHC	1	ND	N	0.295	1.70	
319-85-7	beta-BHC	1	ND	N	0.231	1.70	
319-86-8	delta-BHC	1	ND	N	0.153	1.70	
58-89-9	gamma-BHC (Lindane)	1	ND	N	0.106	1.70	
5103-71-9	alpha-Chlordane	1	ND	N	0.0681	1.70	
5103-74-2	gamma-Chlordane	1	ND	N	0.126	1.70	
72-54-8	4,4'-DDD	1	ND	N	0.184	3.33	
72-55-9	4,4'-DDE	1	ND	N	0.172	3.33	
50-29-3	4,4'-DDT	1	ND	N	0.106	3.33	
60-57-1	Dieldrin	1	ND	N	0.0830	3.33	
959-98-8	Endosulfan I	1	ND	N	0.707	1.70	
33213-65-9	Endosulfan II	1	ND	N	0.0904	3.33	
1031-07-8	Endosulfan sulfate	1	ND	N	0.0809	3.33	
72-20-8	Endrin	1	ND	N	0.0954	3.33	
7421-93-4	Endrin aldehyde	1	ND	N	0.133	3.33	
53494-70-5	Endrin ketone	1	ND	N	0.0721	3.33	
76-44-8	Heptachlor	1	ND	N	0.134	1.70	
1024-57-3	Heptachlor epoxide	1	ND	N	0.0779	1.70	
72-43-5	Methoxychlor	1	ND	N	0.499	16.7	
8001-35-2	Toxaphene	1	ND	N	9.33	66.7	

21 compound(s) reported



St. Rose , LA 70087

Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Client: EA Engineering, Science & Tech

Client ID: 2WSED4 Site: None

New Orleans Laboratory

Project: Gulfco Marine Superfund Site **Project No.:** 2064973 Sample Qu:

Lab ID: 20489229 % Moisture: Not Corrected Matrix: Soil

Description: None Prep Level: Soil **Batch:** 79737

Method: 8082 PCBs Low Soil Units: ug/kg Target List: 8082 SL20

> **Collected:** <u>12/06/06</u> **Received:** 12/08/06

Prepared: 12/19/06 **Analyzed:** <u>12/26/06</u> <u>14:41</u> <u>SLF (1)</u> Prep Factor: 1

CAS Number	Parameter	Dilution	Result	Qu	Adjusted MDL	Reporting Limit	Reg. Limit
12674-11-2	PCB-1016 (Aroclor 1016)	1	ND		8.89	33.3	
11104-28-2	PCB-1221 (Aroclor 1221)	1	ND		12.3	33.3	
11141-16-5	PCB-1232 (Aroclor 1232)	1	ND		10.0	33.3	
53469-21-9	PCB-1242 (Aroclor 1242)	1	ND		10.4	33.3	
12672-29-6	PCB-1248 (Aroclor 1248)	1	ND		5.03	33.3	
11097-69-1	PCB-1254 (Aroclor 1254)	1	ND		9.55	33.3	
11096-82-5	PCB-1260 (Aroclor 1260)	1	ND		7.69	33.3	

⁷ compound(s) reported



St. Rose , LA 70087 Phone: 504.469.0333 Fax: 504.469.0555

LELAP # 02006

Client: EA Engineering, Science & Tech

Client ID: 2WSED15

Project: Gulfco Marine Superfund Site

New Orleans Laboratory

Lab ID: 20489230

Description: None

Method: 8081 Pests Low Soil

Prep Level: Soil

Site: None

Project No.: 2064973

Matrix: Soil

Sample Qu:

% Moisture: Not Corrected

Batch: 79329

Units: ug/kg Target List: 8081 SL20

Collected: <u>12/06/06</u> **Received:** 12/08/06

Prep Factor: 1

Prepared: 12/19/06 **Analyzed:** <u>12/21/06</u> <u>18:54</u> <u>SLF (1)</u>

					Adjusted	Reporting	Reg.
CAS Number	Parameter	Dilution	Result	Qu	MDL	Limit	Limit
309-00-2	Aldrin	1	ND	N	0.0915	1.70	
319-84-6	alpha-BHC	1	ND	N	0.295	1.70	
319-85-7	beta-BHC	1	ND	N	0.231	1.70	
319-86-8	delta-BHC	1	ND	N	0.153	1.70	
58-89-9	gamma-BHC (Lindane)	1	ND	N	0.106	1.70	
5103-71-9	alpha-Chlordane	1	ND	N	0.0681	1.70	
5103-74-2	gamma-Chlordane	1	ND	N	0.126	1.70	
72-54-8	4,4'-DDD	1	ND	N	0.184	3.33	
72-55-9	4,4'-DDE	1	ND	N	0.172	3.33	
50-29-3	4,4'-DDT	1	ND	N	0.106	3.33	
60-57-1	Dieldrin	1	ND	N	0.0830	3.33	
959-98-8	Endosulfan I	1	ND	N	0.707	1.70	
33213-65-9	Endosulfan II	1	ND	N	0.0904	3.33	
1031-07-8	Endosulfan sulfate	1	ND	N	0.0809	3.33	
72-20-8	Endrin	1	ND	N	0.0954	3.33	
7421-93-4	Endrin aldehyde	1	ND	N	0.133	3.33	
53494-70-5	Endrin ketone	1	ND	N	0.0721	3.33	
76-44-8	Heptachlor	1	ND	N	0.134	1.70	
1024-57-3	Heptachlor epoxide	1	ND	N	0.0779	1.70	
72-43-5	Methoxychlor	1	ND	N	0.499	16.7	
8001-35-2	Toxaphene	1	ND	N	9.33	66.7	

21 compound(s) reported



1000 Riverbend Blvd. Suite F St. Rose , LA 70087

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Client: EA Engineering, Science & Tech

Client ID: 2WSED15 Site: None

New Orleans Laboratory

Project: Gulfco Marine Superfund Site **Project No.:** 2064973 Sample Qu:

Lab ID: 20489230 % Moisture: Not Corrected Matrix: Soil

Description: None Prep Level: Soil **Batch:** 79737

Method: 8082 PCBs Low Soil Units: ug/kg Target List: 8082 SL20

> **Collected:** <u>12/06/06</u> **Received:** 12/08/06

Prepared: 12/19/06 **Analyzed:** <u>12/26/06</u> <u>14:56</u> <u>SLF (1)</u> Prep Factor: 1

CAS Number	Parameter	Dilution	Result	Qu	Adjusted MDL	Reporting Limit	Reg. Limit
12674-11-2	PCB-1016 (Aroclor 1016)	1	ND		8.89	33.3	
11104-28-2	PCB-1221 (Aroclor 1221)	1	ND		12.3	33.3	
11141-16-5	PCB-1232 (Aroclor 1232)	1	ND		10.0	33.3	
53469-21-9	PCB-1242 (Aroclor 1242)	1	ND		10.4	33.3	
12672-29-6	PCB-1248 (Aroclor 1248)	1	ND		5.03	33.3	
11097-69-1	PCB-1254 (Aroclor 1254)	1	ND		9.55	33.3	
11096-82-5	PCB-1260 (Aroclor 1260)	1	ND		7.69	33.3	

⁷ compound(s) reported



Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Pace Analytical Services, Inc.

1000 Riverbend Blvd. Suite F St. Rose , LA 70087

Client ID: 2WSED4

Client: EA Engineering, Science & Tech

Project: Gulfco Marine Superfund Site

New Orleans Laboratory

Site: None

Lab ID: 20489229

Project No.: 2064973

Description: None

Matrix: Soil %Moisture: Not Corrected

Collected: <u>12/06/06</u> **Received:** 12/08/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Adjusted MDL	Reporting Limit	Prep.	Analysis	Reg. Limit
Aluminum	EPA 6010	79791	1	6890		mg/kg	5.56	13.7	12/11	12/15 17:37 KJR (1)	
Antimony	EPA 6010	79791	1	ND		mg/kg	0.499	4.11	12/11	12/15 17:37 KJR (1)	
Arsenic	EPA 6010	79791	1	0.856		mg/kg	0.244	0.685	12/11	12/15 17:37 KJR (1)	
Barium	EPA 6010	79791	1	55.2		mg/kg	0.642	13.7	12/11	12/15 17:37 KJR (1)	
Beryllium	EPA 6010	79791	1	0.400		mg/kg	0.0305	0.342	12/11	12/15 17:37 KJR (1)	
Boron	EPA 6010	79791	1	18.3		mg/kg	0.637	3.42	12/11	12/15 17:37 KJR (1)	
Cadmium	EPA 6010	79791	1	0.263 J		mg/kg	0.0302	0.342	12/11	12/15 17:37 KJR (1)	
Cobalt	EPA 6010	79791	1	3.18		mg/kg	0.0892	0.685	12/11	12/15 17:37 KJR (1)	
Copper	EPA 6010	79791	1	4.71		mg/kg	0.396	0.685	12/11	12/15 17:37 KJR (1)	
Iron	EPA 6010	79791	1	6500		mg/kg	3.46	6.85	12/11	12/15 17:37 KJR (1)	
Lead	EPA 6010	79791	1	8.65		mg/kg	0.176	0.342	12/11	12/15 17:37 KJR (1)	
Lithium	EPA 6010	79791	1	7.62		mg/kg	0.418	3.42	12/11	12/15 17:37 KJR (1)	
Manganese	EPA 6010	79791	1	119.		mg/kg	0.418	1.03	12/11	12/15 17:37 KJR (1)	
Mercury	EPA 7471	79792	1	0.0328		mg/kg	0.00150	0.0176	12/13	12/13 09:23 KDG(1)	
Nickel	EPA 6010	79791	1	8.41		mg/kg	0.418	2.74	12/11	12/15 17:37 KJR (1)	
Selenium	EPA 6010	79791	1	ND		mg/kg	0.708	2.40	12/11	12/15 17:37 KJR (1)	
Silver	EPA 6010	79791	1	ND		mg/kg	0.124	0.685	12/11	12/15 17:37 KJR (1)	
Thallium	EPA 6010	79791	1	ND		mg/kg	0.312	0.685	12/11	12/15 17:37 KJR (1)	
Titanium	EPA 6010	79791	1	57.1		mg/kg	0.0424	0.685	12/11	12/15 17:37 KJR (1)	
Zinc	EPA 6010	79791	1	47.2		mg/kg	0.328	1.37	12/11	12/15 17:37 KJR (1)	

20 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

 $(1a)\ pH\ less\ than\ 2.0\ or\ greater\ than\ 12.5\ is\ hazardous\ for\ corrosivity.$

(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size. Reporting Limit is corrected for sample size, dilution and moisture content if applicable.



Pace Analytical Services, Inc. 1000 Riverbend Blvd. Suite F St. Rose , LA 70087

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Client ID: 2WSED15

Client: EA Engineering, Science & Tech

Project: Gulfco Marine Superfund Site

New Orleans Laboratory

Site: None

Lab ID: 20489230

Project No.: 2064973

Description: None

Matrix: Soil %Moisture: Not Corrected

Collected: <u>12/06/06</u> **Received:** 12/08/06

ParameterName	Method	Batch	DF	Result (Qu Units	Adjusted MDL	Reporting Limit	Prep.	Analysis	Reg. Limit
Aluminum	EPA 6010	79791	1	2520	mg/kg	6.54	16.1	12/11	12/15 17:51 KJR (1)	
Antimony	EPA 6010	79791	1	ND	mg/kg	0.587	4.84	12/11	12/15 17:51 KJR (1)	
Arsenic	EPA 6010	79791	1	0.880	mg/kg	0.288	0.806	12/11	12/15 17:51 KJR (1)	
Barium	EPA 6010	79791	1	231.	mg/kg	0.755	16.1	12/11	12/15 17:51 KJR (1)	
Beryllium	EPA 6010	79791	1	0.178 J	mg/kg	0.0360	0.403	12/11	12/15 17:51 KJR (1)	
Boron	EPA 6010	79791	1	8.16	mg/kg	0.750	4.03	12/11	12/15 17:51 KJR (1)	
Cadmium	EPA 6010	79791	1	0.185 J	mg/kg	0.0356	0.403	12/11	12/15 17:51 KJR (1)	
Cobalt	EPA 6010	79791	1	1.44	mg/kg	0.105	0.806	12/11	12/15 17:51 KJR (1)	
Copper	EPA 6010	79791	1	5.95	mg/kg	0.466	0.806	12/11	12/15 17:51 KJR (1)	
Iron	EPA 6010	79791	1	3400	mg/kg	4.07	8.06	12/11	12/15 17:51 KJR (1)	
Lead	EPA 6010	79791	1	8.22	mg/kg	0.207	0.403	12/11	12/15 17:51 KJR (1)	
Lithium	EPA 6010	79791	1	3.35 J	mg/kg	0.493	4.03	12/11	12/15 17:51 KJR (1)	
Manganese	EPA 6010	79791	1	43.6	mg/kg	0.493	1.21	12/11	12/15 17:51 KJR (1)	
Mercury	EPA 7471	79792	1	0.00456J	mg/kg	0.00159	0.0188	12/13	12/13 09:25 KDG(1)	
Nickel	EPA 6010	79791	1	3.51	mg/kg	0.492	3.23	12/11	12/15 17:51 KJR (1)	
Selenium	EPA 6010	79791	1	ND	mg/kg	0.833	2.82	12/11	12/15 17:51 KJR (1)	
Silver	EPA 6010	79791	1	ND	mg/kg	0.146	0.806	12/11	12/15 17:51 KJR (1)	
Thallium	EPA 6010	79791	1	0.753 J	mg/kg	0.368	0.806	12/11	12/15 17:51 KJR (1)	
Titanium	EPA 6010	79791	1	23.5	mg/kg	0.0499	0.806	12/11	12/15 17:51 KJR (1)	
Zinc	EPA 6010	79791	1	102.	mg/kg	0.386	1.61	12/11	12/15 17:51 KJR (1)	

20 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

 $(1a)\ pH\ less\ than\ 2.0\ or\ greater\ than\ 12.5\ is\ hazardous\ for\ corrosivity.$

(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size. Reporting Limit is corrected for sample size, dilution and moisture content if applicable.





1000 Riverbend Blvd. Suite F St. Rose , LA 70087

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Method: EPA 8260 **Project:** 2064973 LCS: <u>20490293</u> 12/14/2006 10:34:00 A

> **Batch:** 79997 MS: 20490294 12/14/2006 1:11:00 PM

Units: ug/kg Original for MS: 20489229 Client Sample

Parameter Name	LCS Spike	LCS %Rec	LCS RPD	MS Spike	MS %Rec	MSD (,	QC L LCS M	imits IS/MSD	Max Qu RPD
Acetone	50	116		50	69	43	17	11 - 166	10 - 183	20 A11
Acrolein	100	44		100	0 *	0 *	0	10 - 150	10 - 147	20 Q1
Acrylonitrile	150	72		150	25	32	24 *	10 - 150	10 - 150	20
Benzene	50	91		50	37	42	14	65 - 136	33 - 143	20
Bromobenzene	50	99		50	26 *	21 *	22 *	70 - 137	70 - 130	20 Q1
Bromodichloromethane	50	122		50	17	26	43 *	56 - 157	14 - 155	20
Bromoform	50	107		50	8 *	12	44 *	46 - 156	10 - 152	20 Q1
Bromomethane	50	90		50	33	46	33 *	41 - 159	14 - 162	20
2-Butanone (MEK)	50	74		50	36	35	3	17 - 164	10 - 166	20 A11
n-Butylbenzene	50	120		50	10 *	6 *	56 *	62 - 144	70 - 130	20 Q1
sec-Butylbenzene	50	101		50	16 *	10 *	44 *	62 - 141	70 - 130	20 Q1
tert-Butylbenzene	50	97		50	20 *	12 *	47 *	59 - 162	70 - 130	20 Q1
Carbon disulfide	50	107		50	20	23	10	38 - 150	14 - 148	20
Carbon tetrachloride	50	125		50	43	41	7	44 - 166	17 - 160	20
Chlorobenzene	50	103		50	24	23	2	65 - 134	14 - 145	20
Chloroethane	50	90		50	51	57	11	34 - 166	28 - 158	20
Chloroform	50	112		50	49	58	17	68 - 134	35 - 141	20
Chloromethane	50	73		50	34	39	14	21 - 152	10 - 158	20
2-Chlorotoluene	50	94		50	21 *	14 *	38 *	48 - 149	70 - 130	20 Q1
4-Chlorotoluene	50	99		50	19 *	14 *	33 *	63 - 142	70 - 130	20 Q1
1,2-Dibromo-3-chloropropane	50	94		50	23	17	26 *	23 - 147	10 - 147	20
Dibromochloromethane	50	102		50	10	17	48 *	53 - 150	10 - 153	20
1,2-Dibromoethane (EDB)	50	119		50	32	40	21 *	47 - 152	10 - 139	20
Dibromomethane	50	117		50	53	64	19	55 - 153	34 - 145	20
1,2-Dichlorobenzene	50	96		50	16	10	45 *	67 - 133	10 - 134	20
1,3-Dichlorobenzene	50	98		50	16	10	46 *	64 - 132	10 - 131	20
1,4-Dichlorobenzene	50	99		50	17	11	44 *	64 - 131	10 - 130	20
trans-1,4-Dichloro-2-butene	100	89		100	10	9 *	6	11 - 161	10 - 157	20
1,1-Dichloroethane	50	105		50	48	56	15	61 - 135	36 - 141	20
1,2-Dichloroethane	50	122		50	45	55	21 *	46 - 162	15 - 158	20
1,1-Dichloroethene	50	109		50	67	65	4	50 - 144	31 - 149	20
cis-1,2-Dichloroethene	50	100		50	43	52	19	56 - 142	26 - 140	20
trans-1,2-Dichloroethene	50	104		50	52	57	8	56 - 138	29 - 142	20
1,2-Dichloropropane	50	111		50	37	45	18	64 - 136	28 - 141	20
1,3-Dichloropropane	50	91		50	31 *	37 *	17	74 - 137	70 - 130	20 Q1
2,2-Dichloropropane	50	103		50	49 *	50 *	2	58 - 141	70 - 130	20 Q1
1,1-Dichloropropene	50	99		50	41 *	40 *	2	56 - 150	70 - 130	20 Q1
cis-1,3-Dichloropropene	50	117		50	11	27	85 *	58 - 142	10 - 145	20
trans-1,3-Dichloropropene	50	112		50	13	28	71 *	47 - 152	10 - 149	20

12/27/2006 15:17:13

MS spike concentrations are not corrected for moisture content of the spiked sample.
(1) MS RPD is calculated via SW-846 rules: on the basis of spiked sample concentrations rather than spike recoveries.



1000 Riverbend Blvd. Suite F St. Rose , LA 70087

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Method: EPA 8260 **Project:** 2064973

New Orleans Laboratory

LCS: <u>20490293</u> 12/14/2006 10:34:00 A

Batch: 79997

MS: 20490294 12/14/2006 1:11:00 PM

Units: ug/kg

Original for MS: 20489229 Client Sample

Parameter Name	LCS Spike	LCS %Rec	LCSD %Rec	LCS RPD	MS Spike	MS %Rec	MSD %Rec	` '	QC Li LCS M	imits IS/MSD	Max Qu RPD
Ethylbenzene	50				50		20	13	62 - 134	11 - 144	
Hexachloro-1,3-butadiene	50	124			50	4 *	* 3 *	* 30 *	65 - 158	70 - 130	20 Q1
2-Hexanone	50	92			50	33	37	10	22 - 162	10 - 165	20
Iodomethane	50	107			50	17	34	70 *	10 - 233	10 - 229	20
Isopropylbenzene (Cumene)	50	99			50	27	18	37 *	50 - 135	10 - 140	20
p-Isopropyltoluene	50	107			50	15 *	* 9*	* 54 *	71 - 137	70 - 130	20 Q1
Methylcyclohexane	50	105			50	24 *	* 17*	* 36 *	50 - 150	50 - 150	20 Q1
Methylene chloride	50	143			50	70	87	20	23 - 161	10 - 146	20 A11
4-Methyl-2-pentanone (MIBK)	50	98			50	39	46	17	10 - 167	10 - 150	20
Methyl-tert-butyl ether	50	92			50	44	56	25 *	41 - 150	10 - 151	20
n-Propylbenzene	50	97			50	21 *	* 14 *	* 41 *	51 - 143	70 - 130	20 Q1
Styrene	50	109			50	12	13	10	64 - 138	10 - 145	20
1,1,1,2-Tetrachloroethane	50	104			50	21	25	15	56 - 154	10 - 162	20
1,1,2,2-Tetrachloroethane	50	82			50	36	31	17	41 - 144	10 - 162	20
Tetrachloroethene	50	108			50	31	28	10	30 - 161	10 - 179	20
Toluene	50	107			50	31	31	2	65 - 135	21 - 147	20
1,2,4-Trichlorobenzene	50	101			50	10	8 *	* 19	44 - 147	10 - 129	20
1,1,1-Trichloroethane	50	107			50	48	47	2	57 - 139	32 - 144	20
1,1,2-Trichloroethane	50	106			50	35	41	16	59 - 145	13 - 150	20
Trichloroethene	50	113			50	45	44	1	64 - 139	24 - 152	20
Trichlorofluoromethane	50	114			50	71	65	9	39 - 157	20 - 153	20
1,2,3-Trichloropropane	50	88			50	32	32	1	42 - 150	21 - 138	20
1,1,2-Trichlorotrifluoroethane	50	103			50	60	50	17	62 - 141	21 - 137	20
1,2,4-Trimethylbenzene	50	103			50	19 *	* 12 *	* 48 *	62 - 145	43 - 124	20 Q1
1,3,5-Trimethylbenzene	50	101			50	20 *	* 13 *	* 45 *	58 - 151	70 - 130	20 Q1
Vinyl acetate	50	104			50	0 3	* 0 *	* 0	10 - 210	50 - 150	20 Q1
Vinyl chloride	50	86			50	53	54	2	33 - 145	15 - 153	20
m&p-Xylene	100	103			100	21	19	11	60 - 138	10 - 147	20
o-Xylene	50	99			50	19	17	11	62 - 139	10 - 149	20

68 compound(s) reported

MS spike concentrations are not corrected for moisture content of the spiked sample.
(1) MS RPD is calculated via SW-846 rules: on the basis of spiked sample concentrations rather than spike recoveries.



1000 Riverbend Blvd. Suite F St. Rose , LA 70087

Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

New Orleans Laboratory

Method: EPA 8270

Project: 2064973

LCS: <u>20488507</u>

12/18/2006 11:08:00 A

Batch: 79654

MS: 20488508

12/18/2006 11:35:00 A

Units: ug/	<u>/kg</u>	Original for	MS:	20488471	Batch Sample
					1

Accumphtheme	Parameter Name	LCS Spike	LCS %Rec	LCSD %Rec	LCS RPD	MS Spike	MS %Rec	MSD %Rec	` ,	QC Li	imits IS/MSD	Max RPD	Qu
Acceaphthylene 1670 70 1670 60 59 2 48-107 27-115 20 Accetophenone 1670 74 1670 7 40-120 40-120 40-120 40-120 40-120 40-120 20 Anthracene 1670 77 1670 64 63 1 51-110 25-123 20 Berux/signifuracen 1670 66 1670 58 58 81 14-112 51-110 25-123 20 Berux/signifuracen 1670 61 1670 52 1670 55 1 40-121 41-138 20 Berux/signifuracen 1670 52 1670 1670 2 58 1 40-121 41-138 20 Berux/signiperlene 1670 68 1670 1670 2 58 1 48-115 20-128 20 Berux/signiperlene 1670 68 1670 1670 58 58 1	Acenanhthene			701400	MI D								
Acetophenone	=												
Aniline	• •							37	2				
Authracene 1670 72 1670 64 63 1 51-110 25-123 20 Benzo(plintranthene 1670 66 1670 58 58 1 49-112 25-123 20 Benzo(plintranthene 1670 61 1670 62 55 1 49-112 21-138 20 Benzo(plintranthene 1670 71 1670 62 61 2 40-121 14-138 20 Benzo(plintranthene 1670 61 1670 1670 7 28 1 41-121 14-138 20 Benzo(plintranthene 1670 61 1670 7 8 1 48-115 20-128 20 Benzo(plintranthene 1670 67 1670 57 58 1 48-115 20-128 20 Benzo(plintranthene 1670 67 1670 57 7 8 1 48-115 20-115 20 Benzo(plintranthen	•			ķ.				33 :	* 1 <i>7</i>				
Benzo(a)unthracene 1670 66 1670 58 58 51 49 - 112 25 - 123 20													
Benox(l) Ilouranthene 1670 61													
Benzoki)fluoramthene													
Benzoic acid 1670 52 1670 1670 29-129 10-141 20 20 20 20 20 20 20 2													
Benzo(g,h.i)perylene 1670 61 1670 1670 1670 29-129 10-125 20	· /							01	-				
Benzo(a)pyrene 1670 68 1670 57 58 1 48 - 115 20 - 128 20													
Benzyl alcohol 1670 73 1670 1670 38 111 20 115 20 4-Bromophenylphenyl ether 1670 70 1670 1670 59 57 2 41 122 15 137 20 4-Chloro-3-methylphenol 1670 58 1670 1670 38 116 19 122 20 4-Chloro-3-methylphenol 1670 58 1670 1670 38 116 10 10 8 116 10 10 8 116 10 10 8 116 10 10 10 10 10 10 1								58	1				
A-Bromophenylphenylether 1670 70 1670 1670 70 1670 70 1670 70 70 70 70 70 70 70								56	1				
Butylbenzylphthalate 1670 60 1670 59 57 2 41-122 18-137 20	•												
Carbazole 1670 77 1670 1670 34 1670 38 10 39 38 10 39 39 39 39 39 39 39 3								57	2				
A-Chloro-3-methylphenol 1670 58 1670 1670 34 1670 43 34 25 * 10 - 86 10 - 79 20	* * *							37	-				
A-Chloroaniline													
bis(2-Chloroethoxy)methane 1670 67 1670 58 58 1 38 - 104 21 - 107 20	• 1							34	25*				
bis(2-Chloroethyl) ether 1670 69 1670 58 58 1 38 - 104 21 - 107 20								٥.	23				
2-Chloronaphthalene 1670 76 1670 64 63 1 44-108 26-112 20 2-Chlorophenol 1670 59 1670 50 50 1 38-109 24-110 20 4-Chlorophenylphenyl ether 1670 73 1670 59 60 1 47-113 21-124 20 Chrysene 1670 76 1670 57 59 3 35-127 10-122 20 Dibenzofuran 1670 76 1670 66 65 2 46-110 21-23 20 1,2-Dichlorobenzene 1670 66 1670 56 58 4 36-103 13-107 20 1,3-Dichlorobenzene 1670 62 1670 52 54 5 33-102 10-107 20 3,3'-Dichlorobenzidine 1670 44 1670 51 46 10 10-111 10-117 20 2,4-Dichlorophenol 1670 54								58	1				
2-Chlorophenol 1670 59 1670 50 50 1 38 - 109 24 - 110 20 4-Chlorophenylphenyl ether 1670 73 1670 59 60 1 44 - 113 28 - 114 20 Chrysene 1670 76 1670 59 60 1 47 - 113 21 - 124 20 Dibenzofuran 1670 76 1670 66 65 2 46 - 110 21 - 123 20 1,2-Dichlorobenzene 1670 66 1670 56 58 4 36 - 103 13 - 107 20 1,3-Dichlorobenzene 1670 62 1670 52 54 5 33 - 102 10 - 107 20 1,4-Dichlorobenzidine 1670 64 1670 51 46 10 10 - 117 20 2,4-Dichlorobenzidine 1670 44 1670 51 46 10 10 - 117 20 2,4-Dichlorobenzidine 1670 66	• /												
4-Chlorophenylphenyl ether 1670 73 1670 59 60 1 44-113 28-114 20 Chrysene 1670 70 1670 59 60 1 47-113 21-124 20 Dibenz/a,h)anthracene 1670 76 1670 57 59 3 35-127 10-122 20 Dibenzofuran 1670 76 1670 66 65 2 46-110 21-123 20 1,2-Dichlorobenzene 1670 66 1670 56 58 4 36-103 13-107 20 1,4-Dichlorobenzene 1670 62 1670 52 54 5 33-102 10-107 20 3,3'-Dichlorobenzidine 1670 64 1670 51 46 10 10-111 10-117 20 2,4-Dichlorophenol 1670 54 1670 62 60 4 46-113 29-115 20 Diethylphthalate 1670 <	•												
Chrysene 1670 70 1670 59 60 1 47-113 21-124 20 Dibenz(a,h)anthracene 1670 76 1670 57 59 3 35-127 10-122 20 Dibenzofuran 1670 76 1670 66 65 2 46-110 21-123 20 1,2-Dichlorobenzene 1670 66 1670 56 58 4 36-103 13-107 20 1,3-Dichlorobenzene 1670 62 1670 52 54 5 33-102 10-107 20 1,4-Dichlorobenzidine 1670 64 1670 53 57 6 32-103 10-107 20 3,3'-Dichlorobenzidine 1670 44 1670 51 46 10 10-111 10-117 20 2,4-Dichlorobenzidine 1670 54 1670 46 46 0 45-110 25-116 20 Diethylphthalate 1670 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>•</td><td></td><td></td><td></td><td></td></td<>									•				
Dibenz(a,h)anthracene 1670 76 1670 57 59 3 35 - 127 10 - 122 20 Dibenzofuran 1670 76 1670 66 65 2 46 - 110 21 - 123 20 1,2-Dichlorobenzene 1670 66 1670 56 58 4 36 - 103 13 - 107 20 1,3-Dichlorobenzene 1670 62 1670 52 54 5 33 - 102 10 - 107 20 1,4-Dichlorobenzene 1670 64 1670 53 57 6 32 - 103 10 - 107 20 1,4-Dichlorobenzene 1670 44 1670 51 46 10 10 - 111 10 - 117 20 3,3'-Dichlorobenzene 1670 44 1670 46 46 10 10 - 111 10 - 117 20 2,4-Dichlorophenol 1670 54 1670 46 46 46 0 45 - 110 25 - 116 20 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>60</td><td>1</td><td></td><td></td><td></td><td></td></t<>								60	1				
Dibenzofuran 1670 76 1670 66 65 2 46-110 21-123 20 1,2-Dichlorobenzene 1670 66 1670 56 58 4 36-103 13-107 20 1,3-Dichlorobenzene 1670 62 1670 52 54 5 33-102 10-107 20 1,4-Dichlorobenzene 1670 64 1670 53 57 6 32-103 10-107 20 3,3'-Dichlorobenzene 1670 44 1670 51 46 10 10-111 10-107 20 2,4-Dichlorophenol 1670 54 1670 46 46 0 45-110 25-116 20 Diethylphthalate 1670 66 1670 62 60 4 46-113 29-115 20 2,4-Dimethylphthalate 1670 67 1670 53 55 4 40-110 21-116 20 Di-n-butylphthalate 1670													
1,2-Dichlorobenzene 1670 66 1670 56 58 4 36 - 103 13 - 107 20 1,3-Dichlorobenzene 1670 62 1670 52 54 5 33 - 102 10 - 107 20 1,4-Dichlorobenzene 1670 64 1670 53 57 6 32 - 103 10 - 107 20 3,3'-Dichlorobenzidine 1670 44 1670 51 46 10 10 - 111 10 - 117 20 2,4-Dichlorophenol 1670 54 1670 46 46 0 45 - 110 25 - 116 20 Diethylphthalate 1670 66 1670 62 60 4 46 - 113 29 - 115 20 2,4-Dimethylphthalate 1670 67 1670 53 55 4 40 - 110 21 - 116 20 Di-n-butylphthalate 1670 68 1670 - 60 60 0 47 - 110 30 - 111 20 4,6-Dinitro-2-methylphenol 1670 44 1670 21 33 45 *													
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2,6-Dinitrotoluene 1670 70 1670 61 60 1 47 - 114 29 - 116 20													
	Di-n-octylphthalate	1670	65			1670		63	2	36 - 132	10 - 176		

^{*} denotes recovery outside of QC limits.

12/27/2006 15:17:13

MS spike concentrations are not corrected for moisture content of the spiked sample.
(1) MS RPD is calculated via SW-846 rules: on the basis of spiked sample concentrations rather than spike recoveries.



Report of Quality Control

Pace Analytical Services, Inc.

1000 Riverbend Blvd. Suite F St. Rose , LA 70087

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Method: EPA 8270 12/18/2006 11:08:00 A **Project:** 2064973 LCS: <u>20488507</u>

> **Batch:** 79654 MS: 20488508 12/18/2006 11:35:00 A

Units: ug/kg Original for MS: 20488471 Batch Sample

Parameter Name	LCS	LCS	LCSD	LCS	MS	MS	MSD	(1)MS	QC	Limits	Max	Qu
	Spike	%Rec	%Rec	RPD	Spike	%Rec	%Rec	RPD	LCS	MS/MSD	RPD	
1,2-Diphenylhydrazine	1670	92			1670				40 - 12	20 40 - 120	20	
bis(2-Ethylhexyl)phthalate	1670	64			1670	58	57	2	41 - 12	25 14 - 144	20	
Fluoranthene	1670	66			1670	66	64	3	47 - 11	5 19 - 130	20	
Fluorene	1670	76			1670	68	66	4	48 - 11	1 24 - 123	20	
Hexachloro-1,3-butadiene	1670	70			1670	58	61	5	37 - 11	0 16 - 114	20	
Hexachlorobenzene	1670	77			1670	63	65	3	45 - 11	4 27 - 117	20	
Hexachlorocyclopentadiene	1670	46			1670	24	22	8	21 - 11	4 10 - 108	20	
Hexachloroethane	1670	71			1670	61	64	4	32 - 10	10 - 114	20	
Indeno(1,2,3-cd)pyrene	1670	71			1670	54	56	3	35 - 12	25 10 - 122	20	
Isophorone	1670	71			1670	61	63	3	43 - 11	0 27 - 113	20	
2-Methylnaphthalene	1670	67			1670	57	59	3	44 - 10	9 17 - 123	20	
2-Methylphenol (o-Cresol)	1670	57			1670				44 - 10	9 25 - 114	20	
2-Nitroaniline	1670	86			1670	76	76	0	36 - 11	6 20 - 119	20	
3-Nitroaniline	1670	46			1670	54	48	11	17 - 9	8 10 - 113	20	
4-Nitroaniline	1670	51			1670	54	52	4	30 - 12	20 10 - 127	20	
Nitrobenzene	1670	77			1670	64	67	4	38 - 10	9 20 - 114	20	
2-Nitrophenol	1670	56			1670				42 - 11	0 19 - 117	20	
4-Nitrophenol	1670	58			1670	62	60	2	30 - 13	2 10 - 138	20	
N-Nitrosodimethylamine	1670	64			1670				40 - 12	20 40 - 120	20	
N-Nitroso-di-n-propylamine	1670	74			1670	65	67	3	37 - 11	0 18 - 118	20	
N-Nitrosodiphenylamine	1670	73			1670	60	61	2	39 - 11	7 10 - 139	20	A10
2,2'-Oxybis(1-chloropropane)	1670	68			1670	60	62	3	29 - 11	4 10 - 118	20	
Phenanthrene	1670	71			1670	63	62	1	49 - 10	9 18 - 128	20	
Phenol	1670	61			1670	52	52	0	36 - 11	2 22 - 113	20	
Pyrene	1670	57			1670	55	56	3	45 - 11	4 10 - 144	20	
Pyridine	1670	54			1670				40 - 12	20 40 - 120	20	
2,4,5-Trichlorophenol	1670	61			1670	54	53	2	45 - 11	3 25 - 117	20	
2,4,6-Trichlorophenol	1670	58			1670	49	49	1	45 - 11	2 25 - 116	20	
67 compound(s) reported												

New Orleans Laboratory

MS spike concentrations are not corrected for moisture content of the spiked sample.
(1) MS RPD is calculated via SW-846 rules: on the basis of spiked sample concentrations rather than spike recoveries.



1000 Riverbend Blvd. Suite F St. Rose , LA 70087

Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Pace Analytical New Orleans Laboratory

Report:	<u>2064973</u>	Batch: <u>79</u>	<u>654</u>						
Lab ID	Type and	Sur 1	Sur 2	Sur 3	Sur 4	Sur 5	Sur 6	Sur 7	Sur 8
	Qualifiers	%Rec	%Rec	%Rec	%Rec	%Rec	%Rec	%Rec	%Rec
20488471	OQS		53		54		70		
20488506	BLANK	78	79	62	75	65	101		
20488507	LCS	88	91	66	81	70	68		
20488508	MS	76	78	55	71	61	69		
20488509	MSD	74	75	51	73	60	69		
20489229	Sample	80	50	31	44	49	196 *		
20489230	Sample	74	39	31	37	40	64		
-	QC limits:		18-116		10-121		30-113		

Sur 2: 2-Fluorobiphenyl (S)

Sur 6: Terphenyl-d14 (S)

Sur 4: Nitrobenzene-d5 (S)

* denotes surrogate recovery outside of QC limits.

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

A Lab ID consisting of a batch number with a B suffix is a method blank. A Lab ID consisting of a batch number with a S suffix is an LCS.

A Lab ID with a MS suffix is a matrix spike.

A Lab ID with a MSD suffix is a matrix spike duplicate.



Report of Batch Surrogate Recovery

Pace Analytical Services, Inc.

1000 Riverbend Blvd. Suite F St. Rose , LA 70087

Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Report	: <u>2064973</u>	Batch: <u>799</u>	<u>97</u>						
Lab ID	Type and	Sur 1	Sur 2	Sur 3	Sur 4	Sur 5	Sur 6	Sur 7	Sur 8
	Qualifiers	%Rec	%Rec	%Rec	%Rec	%Rec	%Rec	%Rec	%Rec
20489229	Sample	125	94	94					
20489230	Sample	114	89	97					
20490292	BLANK	96	94	100					
20490293	LCS	83	84	100					
20490294	MS	125	96	96					
20490295	MSD	113	92	96					
	QC limits:	55-154	57-136	64-129					

Sur 1: 4-Bromofluorobenzene (S) Sur 2: Dibromofluoromethane (S)

New Orleans Laboratory

Sur 3: Toluene-d8 (S)

Pace Analytical

^{*} denotes surrogate recovery outside of QC limits.

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

A Lab ID consisting of a batch number with a B suffix is a method blank. A Lab ID consisting of a batch number with a S suffix is an LCS.

A Lab ID with a MS suffix is a matrix spike.

A Lab ID with a MSD suffix is a matrix spike duplicate.





St. Rose , LA 70087 Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Lab ID: 20488506

Description: 8270 SVOAs Low Soil **Project No.:** <u>2064973</u>

Method: EPA 8270 **Batch:** <u>79654</u> Units: ug/kg

Prep Factor: 1 Leached: Prepared: 16-Dec-06 **Analyzed:** <u>12/18/06</u> <u>10:40</u> <u>JAM (1)</u>

G. G. Y.					Reporting
CAS Number	Parameter	Dilution	Result	Qu	Limit
83-32-9	Acenaphthene	1	ND		333.
208-96-8	Acenaphthylene	1	ND		333.
98-86-2	Acetophenone	1	ND		333.
62-53-3	Aniline	1	ND		333.
120-12-7	Anthracene	1	ND		333.
1912-24-9	Atrazine	1	ND		333.
100-52-7	Benzaldehyde	1	ND		333.
92-87-5	Benzidine	1	ND		1000
56-55-3	Benzo(a)anthracene	1	ND		333.
205-99-2	Benzo(b)fluoranthene	1	ND		333.
207-08-9	Benzo(k)fluoranthene	1	ND		333.
65-85-0	Benzoic acid	1	ND		833.
191-24-2	Benzo(g,h,i)perylene	1	ND		333.
50-32-8	Benzo(a)pyrene	1	ND		333.
100-51-6	Benzyl alcohol	1	ND		333.
92-52-4	Biphenyl (Diphenyl)	1	ND		333.
101-55-3	4-Bromophenylphenyl ether	1	ND		333.
85-68-7	Butylbenzylphthalate	1	ND		333.
105-60-2	Caprolactam	1	ND		333.
86-74-8	Carbazole	1	ND		333.
59-50-7	4-Chloro-3-methylphenol	1	ND		333.
106-47-8	4-Chloroaniline	1	ND		333.
111-91-1	bis(2-Chloroethoxy)methane	1	ND		333.
111-44-4	bis(2-Chloroethyl) ether	1	ND		333.
91-58-7	2-Chloronaphthalene	1	ND		333.
95-57-8	2-Chlorophenol	1	ND		333.
7005-72-3	4-Chlorophenylphenyl ether	1	ND		333.
218-01-9	Chrysene	1	ND		333.
53-70-3	Dibenz(a,h)anthracene	1	ND		333.
132-64-9	Dibenzofuran	1	ND		333.
95-50-1	1,2-Dichlorobenzene	1	ND		333.
541-73-1	1,3-Dichlorobenzene	1	ND		333.
106-46-7	1,4-Dichlorobenzene	1	ND		333.
91-94-1	3,3'-Dichlorobenzidine	1	ND		667.
120-83-2	2,4-Dichlorophenol	1	ND		333.
84-66-2	Diethylphthalate	1	ND		333.

ND denotes Not Detected at or above the reporting limit.

12/27/2006 15:17:16

DF denotes Dilution Factor.

RL denotes sample Reporting Limit.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.



New Orleans Laboratory

Pace Analytical Services, Inc. 1000 Riverbend Blvd. Suite F St. Rose , LA 70087

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Lab ID: 20488506

Description: 8270 SVOAs Low Soil **Project No.:** <u>2064973</u>

Method: EPA 8270 **Batch:** <u>79654</u> Units: ug/kg

Prep Factor: 1 Leached: Prepared: 16-Dec-06 **Analyzed:** <u>12/18/06</u> <u>10:40</u> <u>JAM (1)</u>

	_				Reporting
CAS Number	Parameter	Dilution	Result	Qu	Limit
105-67-9	2,4-Dimethylphenol	1	ND		333.
131-11-3	Dimethylphthalate	1	ND		333.
84-74-2	Di-n-butylphthalate	1	ND		333.
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		333.
99-65-0	1,3-Dinitrobenzene	1	ND		333.
51-28-5	2,4-Dinitrophenol	1	ND		333.
121-14-2	2,4-Dinitrotoluene	1	ND		333.
606-20-2	2,6-Dinitrotoluene	1	ND		333.
117-84-0	Di-n-octylphthalate	1	ND		333.
88-85-7	Dinoseb	1	ND		333.
122-66-7	1,2-Diphenylhydrazine	1	ND		333.
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		333.
206-44-0	Fluoranthene	1	ND		333.
86-73-7	Fluorene	1	ND		333.
87-68-3	Hexachloro-1,3-butadiene	1	ND		333.
118-74-1	Hexachlorobenzene	1	ND		333.
77-47-4	Hexachlorocyclopentadiene	1	ND		333.
67-72-1	Hexachloroethane	1	ND		333.
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		333.
78-59-1	Isophorone	1	ND		333.
91-57-6	2-Methylnaphthalene	1	ND		333.
95-48-7	2-Methylphenol (o-Cresol)	1	ND		333.
91-20-3	Naphthalene	1	ND		333.
88-74-4	2-Nitroaniline	1	ND		333.
99-09-2	3-Nitroaniline	1	ND		333.
100-01-6	4-Nitroaniline	1	ND		333.
98-95-3	Nitrobenzene	1	ND		333.
88-75-5	2-Nitrophenol	1	ND		333.
100-02-7	4-Nitrophenol	1	ND		333.
62-75-9	N-Nitrosodimethylamine	1	ND		333.
621-64-7	N-Nitroso-di-n-propylamine	1	ND		333.
86-30-6	N-Nitrosodiphenylamine	1	ND	A10	333.
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		333.
87-86-5	Pentachlorophenol	1	ND		333.
85-01-8	Phenanthrene	1	ND		333.
108-95-2	Phenol	1	ND		333.

ND denotes Not Detected at or above the reporting limit.

12/27/2006 15:17:17

DF denotes Dilution Factor.

RL denotes sample Reporting Limit.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.





St. Rose , LA 70087 Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Lab ID: 20488506

Description: 8270 SVOAs Low Soil

Method: EPA 8270 **Batch:** <u>79654</u>

Units: ug/kg

Prep Factor: 1 Leached: Prepared: 16-Dec-06 **Analyzed:** <u>12/18/06</u> <u>10:40</u> <u>JAM (1)</u>

Project No.: <u>2064973</u>

					Reporting	
CAS Number	Parameter	Dilution	Result	Qu	Limit	
129-00-0	Pyrene	1	ND		333.	
110-86-1	Pyridine	1	ND		333.	
95-94-3	1,2,4,5-Tetrachlorobenzene	1	ND		333.	
58-90-2	2,3,4,6-Tetrachlorophenol	1	ND		333.	
95-95-4	2,4,5-Trichlorophenol	1	ND		333.	
88-06-2	2,4,6-Trichlorophenol	1	ND		333.	

78 compound(s) reported

ND denotes Not Detected at or above the reporting limit.

DF denotes Dilution Factor.

RL denotes sample Reporting Limit. Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.



St. Rose , LA 70087 Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006



Lab ID: 20490292

Method: EPA 8260

Description: 8260 VOAs Full List Low, BLK

Project No.: <u>2064973</u>

Batch: 79997 Units: ug/kg

Prep Factor: 1 Leached: Prepared: 14-Dec-06 **Analyzed:** <u>12/14/06</u> <u>10:12</u> <u>RMP (1)</u>

					Reporting
CAS Number	Parameter	Dilution	Result	Qu	Limit
67-64-1	Acetone	1	13.2	A11	10.0
107-02-8	Acrolein	1	ND		20.0
107-13-1	Acrylonitrile	1	ND		20.0
71-43-2	Benzene	1	ND		5.00
108-86-1	Bromobenzene	1	ND		5.00
75-27-4	Bromodichloromethane	1	ND		5.00
75-25-2	Bromoform	1	ND		5.00
74-83-9	Bromomethane	1	ND		5.00
78-93-3	2-Butanone (MEK)	1	ND	A11	10.0
104-51-8	n-Butylbenzene	1	ND		5.00
135-98-8	sec-Butylbenzene	1	ND		5.00
98-06-6	tert-Butylbenzene	1	ND		5.00
75-15-0	Carbon disulfide	1	ND		5.00
56-23-5	Carbon tetrachloride	1	ND		5.00
108-90-7	Chlorobenzene	1	ND		5.00
75-00-3	Chloroethane	1	ND		5.00
110-75-8	2-Chloroethylvinyl ether	1	ND		20.0
67-66-3	Chloroform	1	ND		5.00
74-87-3	Chloromethane	1	ND		5.00
95-49-8	2-Chlorotoluene	1	ND		5.00
106-43-4	4-Chlorotoluene	1	ND		5.00
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00
124-48-1	Dibromochloromethane	1	ND		5.00
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00
74-95-3	Dibromomethane	1	ND		5.00
95-50-1	1,2-Dichlorobenzene	1	ND		5.00
541-73-1	1,3-Dichlorobenzene	1	ND		5.00
106-46-7	1,4-Dichlorobenzene	1	ND		5.00
110-57-6	trans-1,4-Dichloro-2-butene	1	ND		5.00
75-71-8	Dichlorodifluoromethane	1	ND		5.00
75-34-3	1,1-Dichloroethane	1	ND		5.00
107-06-2	1,2-Dichloroethane	1	ND		5.00
540-59-0	1,2-Dichloroethene (Total)	1	ND		10.0
75-35-4	1,1-Dichloroethene	1	ND		5.00
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00

ND denotes Not Detected at or above the reporting limit.

12/27/2006 15:17:17

DF denotes Dilution Factor.

RL denotes sample Reporting Limit.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.



Pace Analytical Services, Inc. 1000 Riverbend Blvd. Suite F St. Rose , LA 70087

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006



Lab ID: 20490292

Description: 8260 VOAs Full List Low, BLK **Project No.:** <u>2064973</u>

Method: EPA 8260 **Batch:** 79997 Units: ug/kg

Prep Factor: 1 Leached: Prepared: 14-Dec-06 **Analyzed:** <u>12/14/06</u> <u>10:12</u> <u>RMP (1)</u>

	_				Reporting
CAS Number	Parameter	Dilution	Result	Qu	Limit
78-87-5	1,2-Dichloropropane	1	ND		5.00
142-28-9	1,3-Dichloropropane	1	ND		5.00
594-20-7	2,2-Dichloropropane	1	ND		5.00
563-58-6	1,1-Dichloropropene	1	ND		5.00
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00
100-41-4	Ethylbenzene	1	ND		5.00
87-68-3	Hexachloro-1,3-butadiene	1	ND		5.00
591-78-6	2-Hexanone	1	ND		10.0
74-88-4	Iodomethane	1	ND		5.00
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00
99-87-6	p-Isopropyltoluene	1	ND		5.00
79-20-9	Methyl acetate	1	ND		10.0
108-87-2	Methylcyclohexane	1	ND		10.0
75-09-2	Methylene chloride	1	2.09 J	A11	5.00
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00
103-65-1	n-Propylbenzene	1	ND		5.00
100-42-5	Styrene	1	ND		5.00
630-20-6	1,1,1,2-Tetrachloroethane	1	ND		5.00
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00
127-18-4	Tetrachloroethene	1	ND		5.00
108-88-3	Toluene	1	ND		5.00
120-82-1	1,2,4-Trichlorobenzene	1	ND		5.00
71-55-6	1,1,1-Trichloroethane	1	ND		5.00
79-00-5	1,1,2-Trichloroethane	1	ND		5.00
79-01-6	Trichloroethene	1	ND		5.00
75-69-4	Trichlorofluoromethane	1	ND		5.00
96-18-4	1,2,3-Trichloropropane	1	ND		5.00
76-13-1	1,1,2-Trichlorotrifluoroethane	1	ND		5.00
95-63-6	1,2,4-Trimethylbenzene	1	ND		5.00
108-67-8	1,3,5-Trimethylbenzene	1	ND		5.00
108-05-4	Vinyl acetate	1	ND		10.0
75-01-4	Vinyl chloride	1	ND		5.00
	m&p-Xylene	1	ND		5.00
95-47-6	o-Xylene	1	ND		5.00

ND denotes Not Detected at or above the reporting limit.

12/27/2006 15:17:17

DF denotes Dilution Factor.

RL denotes sample Reporting Limit.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.





1000 Riverbend Blvd. Suite F St. Rose , LA 70087

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Lab ID: 20490292

Method: EPA 8260

Description: 8260 VOAs Full List Low, BLK

Dilution

Project No.: 2064973

Qu

Batch: 79997

Units: ug/kg

Prep Factor: 1

Leached:

Prepared: 14-Dec-06

Result

Analyzed: <u>12/14/06</u> <u>10:12</u> <u>RMP (1)</u>

Reporting Limit

CAS Number Parameter

72 compound(s) reported





1000 Riverbend Blvd. Suite F St. Rose , LA 70087

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

LCS: <u>20491066</u> Method: EPA 8081 12/21/2006 6:21:00 PM **Project:** 2064973

> **Batch:** <u>79329</u> MS: 20486889 12/7/2006 11:32:00 AM

Units: ug/kg Original for MS: 20486028 Batch Sample

Parameter Name	LCS	LCS	LCSD	LCS	MS	MS		(1)MS	QC L		Max Qu
	Spike	%Rec	%Rec	KPD	Spike	%Rec	%Rec	RPD	LCS M	IS/MSD	RPD
Aldrin	17	86			17	70	69	1	37 - 146	10 - 162	20
alpha-BHC	17	92			17	76	70	8	21 - 146	10 - 149	20
beta-BHC	17	87			17	79	82	5	33 - 158	10 - 174	20
delta-BHC	17	96			17	97	116	18	37 - 160	10 - 176	20
gamma-BHC (Lindane)	17	91			17	116	111	5	31 - 147	10 - 154	20
alpha-Chlordane	17	86			17	126	121	3	46 - 135	10 - 173	20
gamma-Chlordane	17	88			17	120	114	3	47 - 135	10 - 164	20
4,4'-DDD	17	82			17	90	89	2	34 - 154	10 - 174	20
4,4'-DDE	17	83			17	85	79	8	43 - 142	10 - 168	20
4,4'-DDT	17	91			17	222 *	219	* 1	36 - 149	10 - 164	20 Q1
Dieldrin	17	85			17	70	63	7	39 - 140	10 - 163	20
Endosulfan I	17	69			17	158 *	105	41 *	26 - 131	10 - 135	20 Q1
Endosulfan II	17	75			17	141	138	2	30 - 138	10 - 155	20
Endosulfan sulfate	17	91			17	95	92	3	38 - 152	10 - 180	20
Endrin	17	100			17	107	103	4	40 - 170	10 - 181	20
Endrin aldehyde	17	93			17	73	72	2	21 - 160	10 - 183	20
Endrin ketone	17	85			17	82	77	6	30 - 152	10 - 184	20
Heptachlor	17	89			17	76	75	2	38 - 140	10 - 151	20
Heptachlor epoxide	17	85			17	86	84	1	42 - 137	10 - 152	20
Methoxychlor	17	91			17	233 *	211	* 10	17 - 178	10 - 207	20 Q1

20 compound(s) reported

New Orleans Laboratory

MS spike concentrations are not corrected for moisture content of the spiked sample.
(1) MS RPD is calculated via SW-846 rules: on the basis of spiked sample concentrations rather than spike recoveries.





1000 Riverbend Blvd. Suite F St. Rose , LA 70087

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Method: EPA 8082 12/26/2006 2:26:00 PM **Project:** 2064973 LCS: <u>20491122</u>

> **Batch:** <u>79737</u> MS: <u>20488987</u>

12/8/2006 7:16:00 PM

Units: ug/kg Original for MS: 20486835 Batch Sample

Parameter Name			LCSD LC %Rec RP		MS %Rec	MSD %Rec	(1)MS RPD	QC Limits LCS MS/MSD	Max RPD	Qu
PCB-1016 (Aroclor 1016)	333	79		333	74	72	3	46 - 129 10 - 1	44 20	
PCB-1260 (Aroclor 1260)	333	79		333	76	52	38 *	46 - 137 12 - 1	48 20	
2 compound(s) reported										

MS spike concentrations are not corrected for moisture content of the spiked sample.
(1) MS RPD is calculated via SW-846 rules: on the basis of spiked sample concentrations rather than spike recoveries.

New Orleans Laboratory Certifications
Louisiana Dept. of Environmental Quality (LELAP) - 02006
Arkansas Dept. of Environmental Quality - 88-0681
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023
Florida Dept. of Health (NELAC) - E87595
Kansas Dept. of Health Environment - E-10266
U.S. Dept. of Agriculture Foreign Soil Permit - S-47270



Pace Analytical Services, Inc. 1000 Riverbend Blvd. Suite F St. Rose , LA 70087

Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Pace Analytical **New Orleans Laboratory**

Report:	2064973	Batch: <u>793</u>	<u>29</u>						
Lab ID	Type and	Sur 1	Sur 2	Sur 3	Sur 4	Sur 5	Sur 6	Sur 7	Sur 8
	Qualifiers	%Rec	%Rec	%Rec	%Rec	%Rec	%Rec	%Rec	%Rec
20486887	BLANK	103	102	118	111				
20486888	LCS	117	117	115	98				
20486889	MS	146	148	111	94				
20486890	MSD	146	133	106	93				
20487271	BLANK	103	102	120	113				
20487272	LCS	77	78	85	77				
20489229	Sample G1	141	336 *	46	46				
20489230	Sample	106	144	0 *	110				
20491065	BLANK	91	95	80	74				
20491066	LCS	87	93	77	76				
	QC limits:	15-172	15-172	10-151	10-151				

Sur 1: Decachlorobiphenyl (Conf)(S) Sur 2: Decachlorobiphenyl (S)

Sur 3: Tetrachloro-m-xylene (Conf)(S)

Sur 4: Tetrachloro-m-xylene (S)

^{*} denotes surrogate recovery outside of QC limits.

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

A Lab ID consisting of a batch number with a B suffix is a method blank. A Lab ID consisting of a batch number with a S suffix is an LCS.

A Lab ID with a MS suffix is a matrix spike.

A Lab ID with a MSD suffix is a matrix spike duplicate.



1000 Riverbend Blvd. Suite F St. Rose , LA 70087

Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Report:	2064973	Batch:	79737
ιχερυι ι.	200 1 2/3	Daten.	17131

New Orleans Laboratory

Lab ID	Type and	Sur 1	Sur 2	Sur 3	Sur 4	Sur 5	Sur 6	Sur 7	Sur 8
	Qualifiers	%Rec	%Rec	%Rec	%Rec	%Rec	%Rec	%Rec	%Rec
20488985	BLANK	82	90	69	82				
20488986	LCS	91	93	70	74				
20488987	MS G1,Q	400 *	60	86	69				
20488988	MSD G1,Q	233 *	41	38	43				
20489229	Sample	50	53	82	50				
20489230	Sample G1	60	72	0 *	60				
20489390	BLANK	105	119	73	115				
20489406	LCS	118	120	68	101				
20491059	BLANK	83	84	62	72				
20491060	LCS	128	129	75	104				
20491121	BLANK	100	90	80	81				
20491122	LCS	91	83	76	71				
QC limits:		30-150	15-172	30-150	10-151				

Sur 1: Decachlorobiphenyl (Conf)(S)

Sur 2: Decachlorobiphenyl (S)

Sur 3: Tetrachloro-m-xylene (Conf)(S)

Sur 4: Tetrachloro-m-xylene (S)

^{*} denotes surrogate recovery outside of QC limits.

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

A Lab ID consisting of a batch number with a B suffix is a method blank. A Lab ID consisting of a batch number with a S suffix is an LCS.

A Lab ID with a MS suffix is a matrix spike.

A Lab ID with a MSD suffix is a matrix spike duplicate.



New Orleans Laboratory

Pace Analytical Services, Inc. 1000 Riverbend Blvd. Suite F

St. Rose , LA 70087 Phone: 504.469.0333

Fax: 504.469.0555

LELAP # 02006

Lab ID: 20491065

Description: 8081 Pests Low Soil **Project No.:** <u>2064973</u>

Method: EPA 8081 **Batch:** <u>79329</u> Units: ug/kg

Prep Factor: 1 Leached: Prepared: 19-Dec-06 **Analyzed:** <u>12/21/06</u> <u>18:05</u> <u>SLF (1)</u>

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	
309-00-2	Aldrin	1	ND		1.70	
319-84-6	alpha-BHC	1	ND		1.70	
319-85-7	beta-BHC	1	ND		1.70	
319-86-8	delta-BHC	1	ND		1.70	
58-89-9	gamma-BHC (Lindane)	1	ND		1.70	
5103-71-9	alpha-Chlordane	1	ND		1.70	
5103-74-2	gamma-Chlordane	1	ND		1.70	
72-54-8	4,4'-DDD	1	ND		3.33	
72-55-9	4,4'-DDE	1	ND		3.33	
50-29-3	4,4'-DDT	1	ND		3.33	
60-57-1	Dieldrin	1	ND		3.33	
959-98-8	Endosulfan I	1	ND		1.70	
33213-65-9	Endosulfan II	1	ND		3.33	
1031-07-8	Endosulfan sulfate	1	ND		3.33	
72-20-8	Endrin	1	ND		3.33	
7421-93-4	Endrin aldehyde	1	ND		3.33	
53494-70-5	Endrin ketone	1	ND		3.33	
76-44-8	Heptachlor	1	ND		1.70	
1024-57-3	Heptachlor epoxide	1	ND		1.70	
72-43-5	Methoxychlor	1	ND		16.7	
8001-35-2	Toxaphene	1	ND		66.7	

²¹ compound(s) reported





1000 Riverbend Blvd. Suite F St. Rose , LA 70087

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Lab ID: 20491121

Description: 8082 PCBs Low Soil

Project No.: <u>2064973</u> Method: EPA 8082

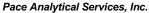
Batch: <u>79737</u> Units: ug/kg

Prep Factor: 1 Leached: Prepared: 19-Dec-06 **Analyzed:** <u>12/26/06</u> <u>14:11</u> <u>SLF (1)</u>

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	
12674-11-2	PCB-1016 (Aroclor 1016)	1	ND		33.3	
11104-28-2	PCB-1221 (Aroclor 1221)	1	ND		33.3	
11141-16-5	PCB-1232 (Aroclor 1232)	1	ND		33.3	
53469-21-9	PCB-1242 (Aroclor 1242)	1	ND		33.3	
12672-29-6	PCB-1248 (Aroclor 1248)	1	ND		33.3	
11097-69-1	PCB-1254 (Aroclor 1254)	1	ND		33.3	
11096-82-5	PCB-1260 (Aroclor 1260)	1	ND		33.3	

⁷ compound(s) reported





1000 Riverbend Blvd. Suite F St. Rose , LA 70087

Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Pace Analytical* New Orleans Laboratory

Project: 2064973

Parameter	Batch	Blank	ARL	Units	LCS	LCS I	LCSD	LCS	MS	MS I	MSD	(1)MS	DUP	QC	Limits	RPD	Qu
					Spike	%Rec	%Rec	RPD	Spike	%Rec	%Rec	RPD 1	RPD	LCS	MS/MSD	Max	
Aluminum	79791	ND	20.0	mg/kg	1000	101			602	593 *	608 *	13		46 - 132	13 - 225	20	Q3
Antimony	79791	ND	6.00	mg/kg	100	107			60	38	45	47 *		10 - 194	10 - 142	20	
Arsenic	79791	ND	1.00	mg/kg	100	99			60	94	92	28 *		71 - 131	46 - 137	20	
Barium	79791	ND	20.0	mg/kg	100	104			60	98	115	18		68 - 131	33 - 156	20	
Beryllium	79791	ND	0.500	mg/kg	100	104			60	96	97	31 *		71 - 127	48 - 140	20	
Boron	79791	ND	5.00	mg/kg	100	96			60	76	84	38 *		56 - 116	33 - 140	20	
Cadmium	79791	ND	0.500	mg/kg	100	98			60	92	94	33 *		69 - 128	31 - 154	20	
Cobalt	79791	ND	1.00	mg/kg	100	100			60	93	96	30 *		73 - 122	45 - 139	20	
Copper	79791	ND	1.00	mg/kg	100	98			60	103	105	29 *		73 - 131	30 - 170	20	
Iron	79791	ND	10.0	mg/kg	1000	105			602	80	197 *	11		37 - 147	10 - 180	20	Q3
Lead	79791	ND	0.500	mg/kg	100	103			60	93	94	27 *		68 - 133	31 - 156	20	
Lithium	79791	ND	5.00	mg/kg	100	100			60	102	100	26 *		62 - 129	49 - 131	20	
Manganese	79791	ND	1.50	mg/kg	100	102			60	0 *	0 *	8		69 - 127	10 - 201	20	
Nickel	79791	ND	4.00	mg/kg	100	102			60	95	97	26 *		71 - 125	39 - 146	20	
Selenium	79791	ND	3.50	mg/kg	100	90			60	83	83	30 *		66 - 126	41 - 129	20	
Silver	79791	ND	1.00	mg/kg	50	98			30	97	100	34 *		25 - 163	10 - 154	20	
Thallium	79791	ND	1.00	mg/kg	100	99			60	84	87	34 *		68 - 130	39 - 137	20	
Titanium	79791	ND	1.00	mg/kg	100	107			60	111	147	26 *		45 - 129	11 - 207	20	
Zinc	79791	ND	2.00	mg/kg	100	100			60	88	95	23 *		64 - 129	19 - 169	20	
Mercury	79792	ND	0.0200	mg/kg	0.1	105			0.1	111	106	1		80 - 120	75 - 125	20	





1000 Riverbend Blvd. Suite F St. Rose , LA 70087

Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

	110Ject. <u>2004975</u>					
	ALL Qualifiers					
Qualifier	Qualifier Description					
N	See narrative for a detailed explanation.					
	Analyte Qualifiers					
Qualifier	Qualifier Description					
A10	N-Nitrosodiphenylamine is reported as diphenylamine.					
A11	This analyte is a common solvent. Its presence in field samples may be an artifact of sample collection, transport, laboratory storage or analysis.					
В	This analyte was detected in the method blank.					
G1	Interferences are present which caused poor surrogate recovery.					
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.					
	QC Qualifiers					
Qualifier	Qualifier Description					
Q1	The matrix spike recoveries are poor. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample recovery.					
Q3	The matrix spike recoveries are poor due to the presence of this analyte in the sample at a concentration greater than 4 times the spiked amount. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample.					